

Government Owned Contractor Operated - the NPL outsourcing experience

David Richardson, NPL

Background

NPL is a world-leading centre for the development and application of the most accurate physical measurements known to science. As the national standards laboratory NPL underpins the national measurement system, holding the UK's physical measurement standards, ensuring consistency and traceability of measurements throughout the economy and coordinating the UK's national measurement system with those of our trading partners. Other areas of NPL expertise include the design and characterisation of materials and mathematical software.

DTI is both owner and the dominant customer. DTI programme objectives are met through a series of three-year programmes. There are currently 16 DTI contracts, each running on a phased three-year cycle. Single tendered work for DTI accounts for some 65% of sales. In addition, NPL offers a unique range of measurement services, contract research, consultancy and knowledge transfer services, funded on a commercial basis.

In 1995, the Department of Trade and Industry awarded the contract to operate the National Physical Laboratory (NPL) to NPL Management Ltd (NPLML), a wholly owned subsidiary of Serco Group plc. It was originally a five-year contract, recently extended to seven years. All operations, scientific and support are the contractual responsibility of NPLML. This paper reviews the experience of this outsourcing initiative.

Changes in DTI laboratory ownership in the mid-90s

The 1990's saw more change in the national metrology infrastructure and in the relationship between government and the executive organisations in national metrology than at any other time in the last century.

At the beginning of the 1990's, the UK government's Department of Trade and Industry (DTI) owned and operated an extensive network of laboratories with a long history of scientific success. However it was the policy of the government at that time to transfer operational assets to private ownership or operation. DTI saw its role in supporting industry as creation of a policy framework to foster a thriving science base, but without necessarily owning all of it.

Different models were applied to different laboratories. The DTI decided that NWML should remain an Executive Agency of the DTI, reflecting the need for independence in the Laboratory's legal metrology mission. A company of consultants was commissioned to consider the future of the remaining three laboratories. A range of options was selected. NEL was sold, initially to Siemens and subsequently to TUV. LGC was sold to a management-led consortium also including the Royal Society of Chemistry and a venture capital company.

The GOCO option for NPL

In the case of NPL, the consultant's report considered the following options:

- Status quo as an Executive Agency i.e. a government organisation under the leadership of a Chief Executive, which contracts to deliver services to its government customer.
- Public sector ownership, but introduction of a private sector management contractor.
- Privatisation.

The second option – to continue with Government ownership but with the introduction of private sector management - was selected. This model is described as Government Owned Contractor Operated (GOCO).

The main reasons for choosing a GOCO were:

- Government retains control of the National Standards Laboratory
- Ability to introduce commercial management, but with freedom to change this management
- Independence from the industrial base NPL exists to serve
- Ability to implement quickly
- The most favourable financial option to government
- International collaboration may have suffered under full privatisation.

Delivering cost reduction and corporate growth

DTI required their contractor to introduce commercial best practice to achieve cost reduction and develop the Laboratory's business.

NPLML committed to and achieved a significant reduction in the science day rates paid by DTI. This was delivered in large part through a reduction in corporate service costs, for example in purchasing and facility management.

Sales growth was also required to reduce the costs of NPL operation borne by DTI and to maintain a flourishing organisation. DTI single tender funding was static in real terms, so growth needed to be built upon a viable programme of business development. Between 1995 and 2000 commercial income increased by 300%. New processes were introduced to ensure greater commercial discipline in bidding and contracting.

Cost reduction and business growth have provided a basis for growth in staff numbers. There were 570 employees at contractisation. Today there are 670, with almost all recruitment being of young high calibre scientists. This has produced a significant improvement in the laboratory's age distribution, reversing a deterioration created by a recruitment moratorium under Executive Agency status.

Improving the quality of programme development and delivery

Each of the DTI programmes referred to above became subject to a fixed price, milestone-based contracting regime. A fundamental DTI requirement was to improve quality control on the project axis. The NPL experience has been that even fundamental physics research can be successfully undertaken within this closely managed framework. NPL's record on milestone delivery is strong.

NPLML was set the formidable challenge of securing certification to ISO 9002 and UKAS accreditation within the first year of contractor operation. Building upon but developing the existing Quality Management System, these were secured in 9 months.

A major project management-training programme is in place and has been instrumental in securing cultural change. Staff utilisation has increased

Every new programme is developed under an 18-month formulation process involving extensive stakeholder consultation and a qualitative evaluation of programme benefit and rationale. NPLML innovations have integrated this development cycle with Capital and Human Resource planning.

Commitment to the mission and scientific excellence

While the introduction of commercial management processes was essential, it was vital also to maintain the commitment to the scientific and mission values which have historically driven excellence in national laboratories.

Scientific quality and capability maintenance are monitored not only by the DTI's Measurement Advisory Group, drawn from industry, but through regular inspections by a committee especially appointed by the Royal Society and the Royal Academy of Engineering Committee.

Relationships with the UK and international scientific community are actively managed under the Strategic Research and Global Metrology programmes respectively. A review in 1999 concluded, "contractorisation has not diminished the international standing of NPL".

Making partnership a reality

NPLML and DTI operate in a spirit of partnership, rooted pragmatically in GOCO the contract.

There is Open Book Accounting. DTI have unlimited on-line access to NPL's new Financial Management System from their London offices. There is also a now well-proven profit sharing mechanism, which converts efficiency gains into additional science work... A comprehensive suite of performance metrics is in place.

The relationship has evolved as a basis for continuing innovation, for example in financial management. An innovative approach to asset leasing, developed by NPLML, has been agreed with Treasury.

The relationship has also formed the basis for a wider collaboration, the National Measurement Partnership, involving all UK organisations with a stake in metrology and standards.

Evolution in staff management and structure

The contract involved a major TUPE transfer. An evolutionary approach has been adopted, but some significant developments in terms and conditions of employment have been secured, in negotiation with IPMS. Union relations are good. Human Resource initiatives continue, for example to reward the creativity of bright young graduates earlier in their careers.

There has been a reduction in hierarchy, both organisationally and in cultural terms. The original structure of six operational divisional directors, reporting to the Deputy Director together with a corporate services division reporting to a Head of Administration has been replaced. Two layers of management have been removed to provide shorter lines of responsibility.

Building for the Future

Like much of the UK national laboratory infrastructure, NPL had developed organically over many decades and the current estate of more than 50 operating buildings has been proving increasingly costly and inefficient.

DTI has therefore entered into a 25-year contract, funded through the Private Finance Initiative, under which the LASER consortium is building a new 36,000 square metre national laboratory facility on the Teddington site to house all NPL operations from 2002.

Conclusions

Contractorisation of NPL was potentially risky. Scientific integrity and quality could have been jeopardised, commercial independence might have been eroded (undermining partnership with business); key staff might have left; and international cooperation might have been withdrawn by other, publicly owned and operated national standards laboratories.

None of this has come to pass. Today NPL has more income and staff than in 1995, is more focused on meeting the needs of the UK economy; and is about to transfer into the worlds most sophisticated, purpose built metrology facility.

The future will present challenges. But the mission and NPL's ability to fulfil it remain strong.

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